

Supplementary Table 1

Protein	Locus	Coverage (%)	Known Chk1 interactor
Chk1	NM_001274	71.2	-
Claspin	NM_022111	7.7	Yes <sup>a</sup>
14-3-3	NM_139323	48.4	Yes <sup>b</sup>
Protein Phosphatase 2C	NM_002706	38.2	Yes <sup>c</sup>
PCNA	NM_022381	13.0	No

**Table S1.** Summary of mass spectrometry data showing proteins identified from FLAG-Chk1 IPs that were not present in control FLAG IPs. The percentage coverage of the proteins is also shown.

<sup>a</sup>(1,2)

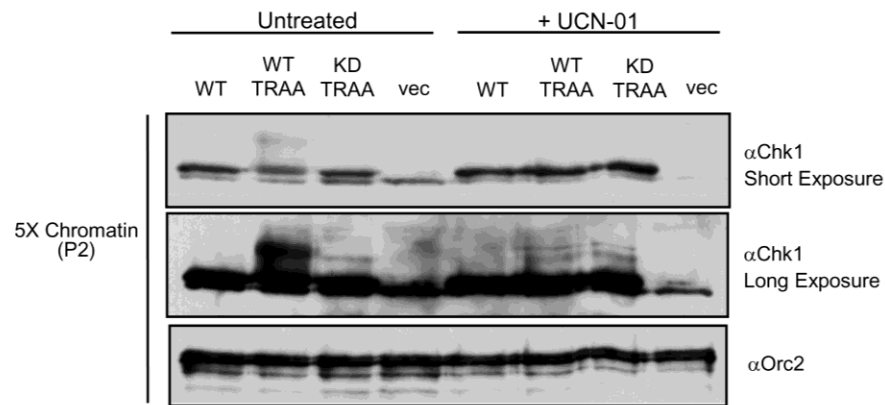
<sup>b</sup>(3,4)

<sup>c</sup>(5)

Supplementary References:

1. Chini, C. C., and Chen, J. (2003) *J Biol Chem* **278**, 30057-30062
2. Kumagai, A., and Dunphy, W. G. (2003) *Nat Cell Biol* **5**, 161-165
3. Chen, M. S., Ryan, C. E., and Piwnicka-Worms, H. (2003) *Mol Cell Biol* **23**, 7488-7497
4. Jiang, K., Pereira, E., Maxfield, M., Russell, B., Godelock, D. M., and Sanchez, Y. (2003) *J Biol Chem* **278**, 25207-25217
5. Lu, X., Nannenga, B., and Donehower, L. A. (2005) *Genes Dev* **19**, 1162-1174

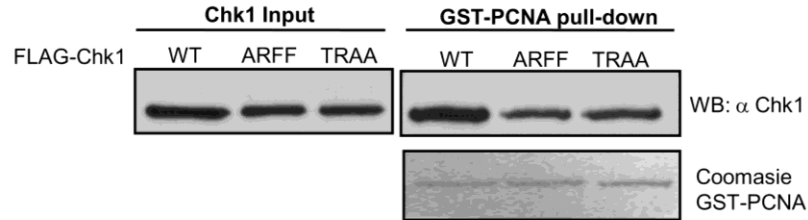
Supplementary Figure 1



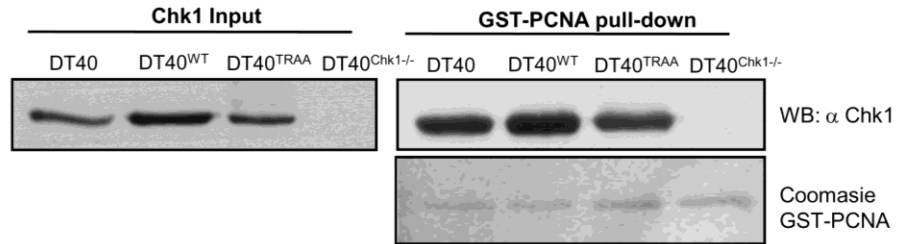
**Figure S1. The altered mobility of FLAG-Chk1<sup>TRAA</sup> on chromatin is a product of auto-phosphorylation.** FLAG-Chk1<sup>TRAA</sup> displays a hyper-shifted form on chromatin (P2) which is significantly reduced following treatment with UCN01 and is not present in kinase-dead FLAG-Chk1<sup>KD-TRAA</sup>. HeLa cells were transfected with FLAG-Chk1 as indicated above the panel and left untreated or treated with 300nM UCN-01 for 3 hours. Orc2 was used to verify loading of the chromatin fraction.

Supplementary Figure 2

(A)



(B)



**Figure S2. Mutations in the PIP box of full-length Chk1 do not abrogate PCNA binding.**

(A) GST-PCNA was assessed for the ability to interact with full length FLAG-Chk1<sup>WT</sup>, FLAG-Chk1<sup>ARFF</sup> and FLAG-Chk1<sup>TRAA</sup> expressed in HeLa cells. In the context of the full-length Chk1 protein, mutation of conserved hydrophobic residues in the PIP box does not abolish PCNA binding. (B) GST-PCNA was probed for the ability to bind Chk1 from DT40 cells and DT40<sup>Chk1-/-</sup> cells reconstituted with GgChk1<sup>WT</sup> (DT40<sup>WT</sup>) or GgChk1<sup>TRAA</sup> (DT40<sup>TRAA</sup>). DT40<sup>Chk1-/-</sup> cells were included as a control. As with human constructs, mutations within the PIP box do not abolish PCNA binding to the full length Chk1 protein.